

DESIGN PANEL NO. 44 1-22-98

DBSAFE THOR DESIGN REVIEW - Jerry Murr

OVERVIEW

CLCS DBSAFE is a comprehensive Checkout and Launch Control System (CLCS) software capability that provides an interactive user interface supporting the evaluation, incorporation, and historical tracking of engineering changes to the FD Database. DBSAFE for CLCS is ported code baselined from the DBSAFE software developed for the replatform of CCMS Support Software to the Shuttle Data Center (SDC).

The core purpose of the CLCS DBSAFE is to provide the capability to maintain the FD Database. The FD Database is the portion of the CLCS DBSAFE database that contains the information on the measurements, commands, and system parameters needed for CLCS. The attributes of measurements and commands for the orbiters, payloads, ground support equipment, etc., are collected from the various design agencies, processed into a format that is compatible with CLCS, and stored in the FD Database using CLCS DBSAFE software. The data is then available to support the CLCS Application S/W Development Environment and Test Build processes.

CLCS DBSAFE also provides the capability to create and maintain TCID build specifications for the FD Directory Build process. CLCS DBSAFE validates and stores user specifications in the CLCS DBSAFE database. CLCS DBSAFE facilitates the generation of TCID specifications by automating the following functions:

- Assignment and traceability of Vehicle Configuration Names (VCN) and formats to Test Configuration Identifiers (TCID) based on a list of engineering provided by Ground Software Integration (GSI)
- Assignment of projected VCNs and formats to TCIDs based on matching each mission/TCID configuration to the effectivities of engineering changes in the FD Database
- Assignment and traceability of format revisions to each mission/TCID based on the format engineering defined in the Shuttle Data Tape (SDT)
- Support elimination of invalid/duplicate/overlapping addressing in the FD Database, that would otherwise cause errors in a TCID build

ACTIONS

1. Validate station data type requirements for CLCS.

ACTIONEE

Laurie Griffin/
Larry Wilhelm

DUE DATE

2/12/98

STATUS

In work

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| 2. Investigate how to provide the CCMS BAT Table equivalent in CLCS which will provide a way for the Gateways to read FDs which they need for processing. | Charla King | 2/12/98 | In work |
| 3. Insure that payload PCM data is incorporated into the SOW for Atlas. | Chark King | 2/12/98 | In work |
| 4. Work with Paul Shields and John Wilkinson to insure that there is not a duplication of effort between what Test Build does and what Application Services does in relation to FD and applications. | Chark King | 2/12/98 | In work |

Approved